

JUDGES' RUBRIC

Brookhaven National Laboratory Elementary School Science Fair

Criteria	4	3	2	1
Originality of Question	Original idea going beyond a traditional or existing idea	Different perspective on a traditional idea	Expanding an existing idea	No originality
Hypothesis/ Define the Problem	Thoroughly developed with reasoning. Ex. "I think...because..." or a clearly defined problem to be solved or question to be answered.	Sufficiently developed	Partially developed	Major flaws
Procedures/ Engineering Design Solutions	Easy to follow sequence of the Scientific Method or Engineering Design Process. Dated sequence of entire process captured by the student in a log or journal. This includes all observations, data collection, and changes to project.	Easy to follow sequence of the Scientific Method or Engineering Design Process. Dated sequence of entire process captured by the student in a log or journal with moderate detail.	Somewhat difficult to follow because of lapses in the sequence of the Scientific Method or Engineering Design Process. Minimal documentation included in a log or journal.	Difficult to follow; no sequence of the Scientific Method or Engineering Design Process. No data collection shown.
Investigation Trials	Experiment was performed 3 or more times and/or sample size was exceptional or engineering design was tested 3 or more times.	Experiment was performed 2 times and/or sample size was adequate or engineering design was tested 2 times.	Experiment was performed 1 time and/or sample size was minimal or engineering design was tested 1 time.	Experiment was performed incompletely.
Analysis	Data is clearly presented in the form of a table, chart, or other graphic organizer and directly relates to the hypothesis/question/problem.	Data is reasonably presented and shows good relationship to hypothesis/questions/problem.	Data is minimally presented and shows some relationship to hypothesis/question/problem.	Data is not presented and no relationship to hypothesis/question/problem is evident.
Evaluation/ Conclusion/ Solution	A logical conclusion has been drawn based on the data collected or the design(s) tested. The conclusion or design answers the hypothesis/question/problem and/or raises a new hypothesis/question/problem. Has real world application.	A logical conclusion has been drawn based on the data collected or the design(s) tested.	A fairly reasonable conclusion has been drawn based on the data collected or the design(s) tested.	The conclusion drawn or solution designed is not shown to relate to the data collected.
Presentation (Overall Impression)				

*Scientific Method: question, hypothesis, investigating/testing, analysis and evaluation/conclusion.

**Engineering Design Process: Identify a need or problem, research/brainstorm possible solutions, choose solution(s), design solution(s), test and evaluate.